

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

A NEW SELAGINELLA FROM OKLAHOMA AND
TEXAS.*

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Among a few pteridophytes from Oklahoma recently received for identification are specimens of a new *Selaginella*, described below. An examination of herbarium material discloses other specimens from Texas and Oklahoma under cover of *S. Wrightii*, with which species there is no close relationship.

Selaginella Sheldoni Maxon, n. sp.

Plants prostrate, the main stems up to 10 or 12 cm. long, everywhere rooting, densely pinnately branched, the lower branches often spreading, up to 4 cm. long, mostly bipinnate, the ultimate branchlets in general short, simple or with very short knoblike divisions, sterile, or the apical ones often fertile to their base; stems, branches, and minor divisions all densely leafy, the leaves mostly curving upward, giving a definite dorsoventral aspect to the plant. Leaves crowded, imbricate, those of the under side appressed, soon discolored, the others secund or at first spreading, all herbaceous, grayish green, plane above, convex beneath and very narrowly sulcate to the apex, subulate to lance-subulate, setigerous at the acutish apex (the seta slender, white, persistent, 0.6 to 0.8 mm. long, serrulate), ciliate throughout, the cilia 7 to 10 on each side, the lower and middle ones the longest (0.14 to 0.2 mm. long), whitish, widely oblique, straight or falcate, the upper ones shorter, ascending, passing into elongate hyaline serratures at the apex; leaves of the under ranks (seta included) 2.4 to 2.7 mm. long, 0.4 to 0.5 mm. broad, the others slightly shorter. Spikes few, arcuately ascending, 8 to 12 mm. long, 1 to 1.3 mm. in diameter; sporophylls ovate to narrowly deltoid-ovate, long-acuminate, short-auriculate, very narrowly sulcate along the dorsal keel, short setigerous at the tip (the seta 0.3 to 0.5 mm. long, pungent, serrulate), short-ciliate, the cilia 16 to 22 on each side, whitish, the basal ones 0.07 to 0.09 mm. long, spreading, those above shorter, oblique, passing into pungent ser-

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ratures; larger sporophylls (seta included) 1.7 to 2.3 mm. long, averaging 0.9 mm. broad. Megasporeangia few, basal and mostly ventral; megaspores about 0.45 mm. in diameter, yellow, delicately reticulate, the narrow low ridges and the broad surfaces of the areoles smooth; microspores bright yellow to orange, up to 0.055 mm. in diameter, granulose.

Type in the United States National Herbarium, no. 48,133, collected on Quanah Mountain, Oklahoma, July 28, 1891, by C. S. Sheldon (no. 233); originally listed* as *S. rupestris* (L.) Spring.

The following additional specimens of *S. Sheldoni* are in the National Herbarium:

OKLAHOMA: Headquarters Mountain, near Granite, on barren granite, May 4, 1918, *F. C. Greene*; Chickasha, on sandstone, June 10, 1918, *F. C. Greene*.

TEXAS: Crab Apple Creek, Gillespie County, *G. Jermy* 343; Murphysville, July, 1883, *V. Howard*; Alpine, Brewster County, March 7, 1918, *E. O. Wooton*.

Of the species known from the United States *Selaginella Sheldoni* might be confused only with *S. Wrightii*, of the Mexican Border region, which it resembles in its prostrate habit and recurved sterile branchlets. The resemblance is only superficial, however, *S. Wrightii* differing in all essential characters. The stems of the latter are shorter; the leaves are chartaceous, decidedly greener, and much longer (up to 3.5 mm. long), have the attenuate apex tipped by a short, stiff, lutescent seta, and bear longer and more numerous cilia; the spikes are about twice as long as those of *S. Sheldoni*; the sporophylls are narrower and longer and bear a shorter seta and more numerous cilia; and the megaspores are not only one-third smaller but strongly flexuose-rugulose, in marked contrast to the delicately reticulate megaspores of *S. Sheldoni*. In megaspore and other characters *S. Sheldoni* is related, apparently, to a small subgroup of Mexican species, several of which are undescribed.

* Contr. U. S. Nat. Herb. 1: 201. 1892.